

Abstract

GPS signals are typically weak and thus easily interfered with by other radio transmissions in the same or adjacent frequency bands. Interference can be especially problematic when the GPS receiver is co-located with a communications device that includes a radio transmitter, such as a cellular telephone. The transmitted signal from the co-located communication device can overload (or saturate) the GPS receiver front-end designed to receive weak GPS signals. In such a situation no useful information can be extracted from the received GPS signals originating from the GPS satellites. Described herein is a novel apparatus and method that can be used to minimize the effect of co-located interference on a GPS receiver.